

THE STATUS OF CUCKOOS *CUCULIDAE* IN THE DARWIN AREA

NORTHERN TERRITORY, 1974 - 1980

By H.A.F. Thompson.

Introduction

This is the second of a series of papers summarising data obtained by a number of observers around the Sanderson Sewage Ponds and other sites in the Darwin area. (For the first, see McKean, 1981). Although the observations have been of a casual nature and are subject to observer bias, they have been made with reasonable regularity from 1974 to 1980. This includes the period preceding cyclone Tracy on the night of 24-25 December 1974. As a whole, these observations from Sanderson comprise the only such body of phenological data relating to birds from the immediate Darwin area.

The Cuculidae present special problems. All but one of the Australian species are brood-parasitic and, as a result, breeding data is difficult to obtain. In the case of the Darwin area, we may lack confirmed breeding records of some common species.

In addition, there are identification problems with some species.

We have recorded nine species from the Darwin area.

Methods

Counts were conducted at a number of sites around Sanderson Sewage Ponds, Darwin, from 1974 to 1980. The study continues. As a rule, each site was visited at least once a month.

The data from all sites is summarised in a single histogram for each species, giving the total estimated number of individuals per calendar month, totalled for all seven years. For example, this means that the July entry on the histogram represents a total for all the July estimates from 1974 to 1980 added together.

Oriental Cuckoo (*Cuculus saturatus*)

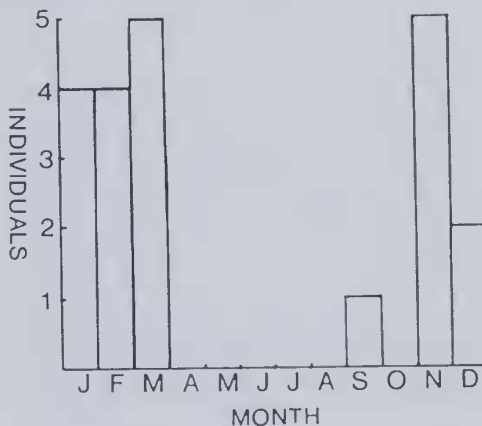


Fig. 1

The erratic pattern suggest that we have inadequate data for this species which does not breed in Australia. It is silent when it is here and may easily be overlooked.

The Oriental Cuckoo is widespread as a breeding species from central Russia, east and north into Japan, China, Taiwan and the Himalayan region. It winters in southern India, Philippines, parts of Indonesia, Papua New Guinea and northern Australia (from Condon, 1975).

The September record is probably atypical. Although the data is scanty, my own personal records from outside the study area and those of J.L. McKean (pers. comm) suggests peaks at either end of north Australian wet season, that is in November and March. Although the species clearly winters in the Darwin area, perhaps there is also migratory passage coinciding with the spring and autumn movements of the northern hemisphere.

Pallid Cuckoo (*Cuculus pallidus*)

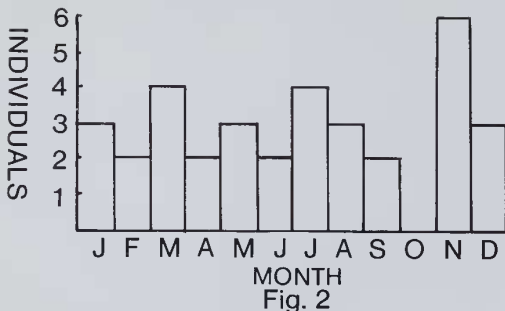


Fig. 2

This is another uneven histogram, suggesting inadequate data, although the species has frequently been identified in the Darwin area by its distinctive call.

In spite of this, I know only of two positive breeding records for the Top End of the Northern Territory. J.L. McKean and J.A. Estbergs saw Bar-breasted Honeyeater (*Ramsayornis fasciatus*) feeding a recently fledged bird between the West and South Alligator Rivers on 10 June 1979. P.F. Rowen and myself saw a well-grown fledgling being fed by a White-gaped Honeyeater (*Meliphaga unicolor*) in a Darwin garden on 18 November 1980. Adult birds were noisy and active in that area, close to the Palmerston Golf Course throughout much of November 1980.

Most Most of the records for this species are from the identification of its calls only so that the two peak months of March and November represent its most vocal periods. As the species is apparently present throughout the year, this suggests that either the bird has a 'double' breeding season, co-inciding with the rather stormy weather at either end of the wet season or that during these months, sexually active birds migrate through the area.

Condon (1975) describes the species as migrating to New Guinea, the Aru Islands, the Lesser Sundas and Moluccas. The populations breeding in southern Australia are largely if not totally migratory, according to Pizzey's summary (1980).

W.R. Mason (pers. comm.) has provided me with nine breeding records of this species. All involve eggs in the nest of the host species. Two records are dated 30 November and 27 December; of the others, six are in the period from 17 February to 22 March, the last being in mid-April, the date unspecified. Although the data is scanty, it seems to bear out the double peak on the histogram.

The host-species involved were: from 17 February to mid-April, Bar-breasted Honeyeater (*Ramsayornis fasciatus*), 5, Rufous-banded Honeyeater (*Conopophila albogularis*), 2; 30 November, Broad-billed Flycatcher (*Myiagra ruficollis*), 1, and 27 December, Paperbark Flycatcher (*M. nana*), 1. Perhaps the Brush Cuckoo parasitizes different hosts at different times of the year.

Brush Cuckoo (*Cuculus variolosus*)

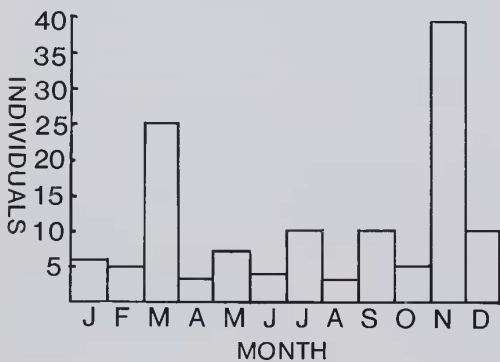


Fig. 3

Little Bronze-cuckoo (*Chrysococcyx minutillus*)

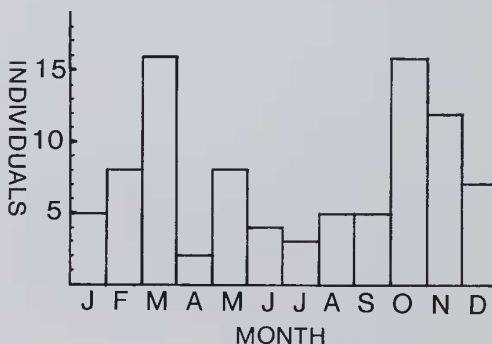


Fig. 4

Crawford (1972), writing of the Darwin area, describes this species as moderately common in monsoon forest and mangroves and notes that it is more often heard than seen. He gives a record of courtship feeding on 12 December 1970. Like the Brush Cuckoo, it is most commonly identified by call and the two peaks on the histogram, in March and October suggest again that it is either most territorial at these times or that sexually active birds are passing through.

However, unlike the Brush Cuckoo, there is no evidence that the Little Bronze-cuckoo is migratory. The species is widespread in northern Australia, south-east Asia and the New Guinea sub-region.

J.L. McKean (pers. comm.) found a fresh egg in the nest of Large-billed Gerygone (*Gerygone magnirostris*) at Buffalo Creek, within the study area, on 10 October 1972. G. Ragless (per McKean) found eggs in the nests of the same species at Buffalo creek and Ludmilla Creek in Darwin on 8 October 1972.

W.R. Mason (pers. comm.) has provided me with fourteen breeding records of this species from the Darwin area. Twelve involve the Large-billed Gerygone as host species; with the other two, the host in one case was the Green-backed Gerygone (*G chloronata*) and the other the Mangrove Gerygone (*G levigaster*). McKean has also seen a juvenile being fed by a Dusky Gerygone (*G tenebrosa*) at Derby in the Kimberley district of W.A. This species does not occur in the N.T. Mason and McKean (pers. comm.) have pointed out that the Large-billed Gerygone nests almost throughout the year and that it has a rather conspicuous nest. They have suggested that the long breeding season may help to offset losses through parasitism by Little Bronze-cuckoos.

A month-by-month analysis of the breeding records of Little Bronze-cuckoo again tends to support the histogram. March and October had five records each; February, April, July, September, November and December had one record each. We have no records for the other months. (Mason's record involving Green-

backed Warblers is undated and omitted from this analysis; Ragless' record of 'nests' - i.e. plural - is read as two.)

The Little Bronze-cuckoo seems to be little known. Slater (1970) describes its voice as "apparently not recorded". Pizzezy describes its calls as similar to those of the Rufous Bronze-cuckoo (*Chrysococcyx russatus*) a species from Queensland and southern Papua New Guinea that does not occur in the N.T.

In my experience, the species has two main calls, a descending sequence of usually five notes and a rather protracted, insect-like trill on a single pitch. The descending call can usually be distinguished from the similar call of the Horsfield's Bronze-cuckoo (*Chrysococcyx basalis*) by having five notes only but this is not always reliable. *C. basalis* usually gives seven or more.

In addition to its parasitism of *Gerygone* sp., I have also seen a female being mobbed by a Paperbark Flycatcher (*Myiagra nana*).

Horsfield's Bronze-cuckoo (*Chrysococcyx basalis*)

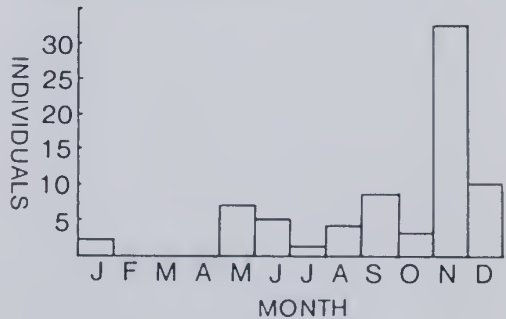


Fig. 5

This is a migratory species in Australia. Condon states that it is a partial migrant in the warmer parts of the country but a total migrant in the cooler areas of the south-east. In our records, it is probably identified more frequently by sight as opposed to call only, than most other cuckoos. There are several records of immature birds. This species is less frequently heard than *C. minutillus*.

The November peak is caused by an abnormal number of records of the species during November 1980. This month was quite atypical, compared with November of other years. The absence of the species for three months of the year, February, March and April, with only a low figure for January, suggests that the species breeds outside the area. Storr (1979) records breeding north to the McArthur, implying that it does not breed in the Top End. The Darwin population may well be largely if not entirely migratory and non-breeding.

I know of no positive breeding record for the Darwin area. McKean (1980) has an interesting record of a bird on migration at West Island, Ashmore Reef off the W.A. coast at 12°. 15'. S, 122°. 58'. E., on 9 November 1979.

Black-eared Cuckoo (*Chrysococcyx osculans*)

There are two records from the study area of this species which breeds in the inland of Australia. It may be a partial migrant as it is known from the Moluccas and New Guinea (Condon).

The two records from the study area are both in June and both refer to single birds only; 15 June 1977 (H.A.F. Thompson) and 4 June 1979 (J.L. McKean and J.A. Estbergs.)

We have four other records from the Top End: a single bird at Knuckey's Lagoon near Darwin, 26 July 1974 (J.L. McKean); 1 at Humpty Doo, 10 June 1979 (A.L. Hertog); 1 near the West Alligator River on the Arnhem Highway, 22 June 1979 (J.A. Estbergs) and 1 in forest between Berrimah and Cameron's Beach near Darwin, 3 October 1980 (J.L. McKean).

Indian Koel (*Eudynamys scolopacea*)

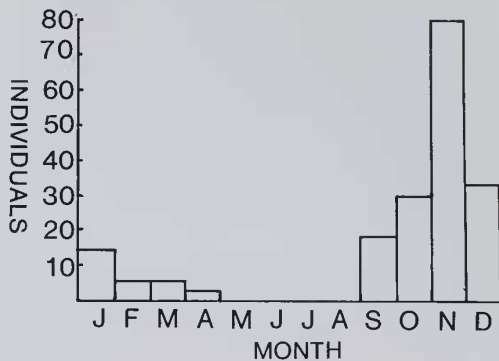


Fig. 6

The Indian Koel is an obvious migrant in much of northern and eastern Australia. In Darwin, it is largely absent during the dry season; the November peak on the histogram co-incides with its most vocal period. The highest single month was November 1974; the total of 56 observations for that month has not been matched. The species evidently suffered from the destruction of its monsoon and rainforest habitat during cyclone Tracy. This included the total destruction of some pockets of this habitat near Sanderson itself and others outside the study area, such as at Casuarina Beach.

In spite of this, it is quite adaptable and a suburban bird in parts of Darwin, such as Nightcliff, where mature native figs (*Ficus* sp.) remain in the gardens and streets as relicts of the former rainforest. Although it is a large and conspicuously coloured species, it is secretive and easily overlooked when not calling.

Although there are few confirmed breeding records, other species clearly recognise the Indian Koel as a threat and mob it. I have a personal record of a full-grown immature being attended by Helmeted Friarbird (*Philemon buceroides*)

near Buffalo Creek on 15 January 1978. A.L. Hertog and the writer saw a female being chased by a Helmeted Friarbird near Buffalo Creek on 29 October 1977. On 15 January 1978, I saw a male perching quite openly in suburban Nightcliff although it was being mobbed by Blue-faced Honey-eater (*Entomyzon cyanotis*) and Green Figbird (*Sphecothebes viridis*).

Boekel (1980) records a pair of Little Friarbirds (*Philemon citreogularis*) feeding a fledgling Koel near Victoria River Downs station. McKean (pers. comm.) records the dissection of a female collected near Berry Springs on 31 October 1978. He noted that the oviduct of the bird was convoluted and found three distinctly enlarged oocytes. He commented: "... obviously a breeding bird."

I witnessed the nuptial display of the species near Brinkin, Darwin, on 12 November 1978.

The diagram (fig. 7) shows a fully grown immature Koel and is based on my field sketch of the bird at Buffalo Creek on 15 January 1978. Although the plumage is described briefly in most standard works, I know of no illustration of it. It is distinct from

that of the adult female in the following respects:

1. The adult female has a complete black cap and marked moustachial stripe, with no supercilium ('eyebrow'). This immature showed a broad whitish supercilium, with black only on the 'top' of the head. The moustachial stripe was obscure.
2. The adult female has the upperparts blackish with whitish markings. This includes the tail. The immature had rich tawny upperparts with black markings, including the tail.
3. Underparts of the immature were off-white with a few crescentic dark markings on the breast. (see below).

McKean (pers. comm.) has examined the Australian museum specimens of this species, including immatures and warns that there is wide variation in this plumage.

However, a thorough knowledge of the immature plumage of this species is essential in assessing possible records of the next species, the Long-tailed Cuckoo (*Eudynamis taitensis*).



Fig. 7
IMMATURE INDIAN KOEL

Long-tailed Cuckoo (*Eudynamys taitensis*).

(Note: the inclusion of this species in the account does not mean I endorse the following as confirmed records.)

The Long-tailed Cuckoo breeds in New Zealand and migrates northwards to Papua and eastwards into the Pacific. Slater (loc. cit.) includes it because it occurs on migration on Norfolk and Lord Howe Islands. There is a record of a bird on Gato Island in the south-west Coral Sea, on 28 November 1961. (Hindwood et al., 1963.)

It is an unlikely vagrant in the Darwin area and more likely, for geographical reason, to occur on the coast of Queensland.

L. Potts (per J.L. McKean) has adequately documented a sighting near Buffalo Creek on 27 May 1980 but it remains unconfirmed. A previous 'square-brackets' record from Maningrida is on file with the Bird Observers' Club.

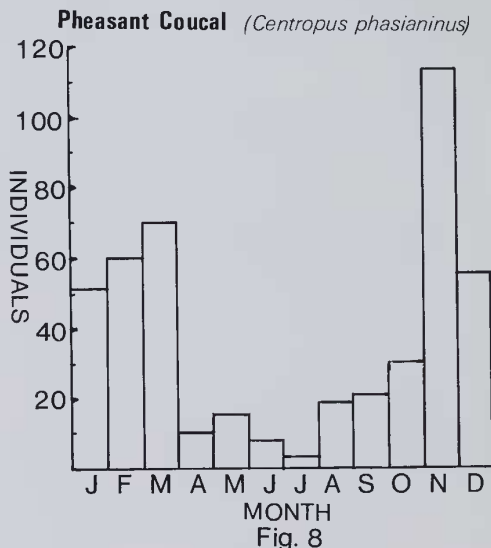
The Long-tailed Cuckoo has some similarities with the immature Koel but the most marked distinction is that it has streaks, not barring, on the underparts. Local observers should be aware of the differences.

Channel-billed Cuckoo (*Scythrops novaehollandiae*)

Within the study period, there were only three records of this species from the area, two in April 1974 (J.L. McKean and H.A.F. Thompson) and one in October 1980 (H.A.F. Thompson). However there are three recent records from March 1981.

It is a migratory species and seems to be much less common in the N.T. than it is in northern Queensland. There are occasional dry season records, a period when the species is normally absent from the Darwin area. I found it quite common at Scotts Creek, east of Humpty Doo on 25-26 July 1981. A.L. Hertog recorded a single bird near Kapalga on 4 August 1980 and 22 July 1981 in the Kapalga area, east of Darwin.

The main host species seems to be the Torresian Crow (*Corvus orru*). A solitary bird at Cameron's Beach on 12 November 1978 was being pursued by a Torresian Crow (J.L. McKean and H.A.F. Thompson) and Boekel (1980) recorded a large fledgling being fed by the same species in the Victoria River Downs station area. M. Reed (pers. comm. has recorded the same from Katherine.



This is the most conspicuous member of the family, being readily both seen and heard. Crawford suggested that the species undertakes some seasonal movements because it is little observed during the dry season when the controlled burning should make it easy to see. Birds in August and September generally lack the black plumage on the head and underparts; this is attained patchily by the end of the year.

The November peak on the histogram represents the period when the species is most vocal and demonstrative. There are a few confirmed breeding records from the wet season. Building probably starts in November when the birds are noisy; I saw an adult carrying material at Kahlin in Darwin on 1 November 1980. I found a young bird, unable to fly, near Robin Falls in the Adelaide River district on 9 April 1977, probably a late date.

Acknowledgements

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